

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/046565 A3

(51) International Patent Classification⁷: C07H 21/04,
A01N 43/04, A61K 31/70

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(21) International Application Number:
PCT/IL2004/001049

(22) International Filing Date:
16 November 2004 (16.11.2004)

(25) Filing Language: English

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

(30) Priority Data:
60/520,935 17 November 2003 (17.11.2003) US

(71) Applicant (for all designated States except US): QUARK
BIOTECH, INC. [US/US]; 6536 Kaiser Drive, Fremont,
California 94555 (US).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(72) Inventors; and
(75) Inventors/Applicants (for US only): MOR, Orna [IL/IL];
12 Emek Ayalon, Ganei Ilan, 55029 Kiryat Ono (IL). FE-
INSTEIN, Lena [IL/IL]; 12/29 HaHagana Street, Rehovot
(IL). SHAPIRA, Hagit [IL/IL]; Mashavit 20, 45201 Hod
Hasharon (IL).

(88) Date of publication of the international search report:
15 December 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

WO 2005/046565 A3

(54) Title: DIAGNOSIS AND TREATMENT OF KIDNEY FIBROSIS AND OTHER FIBROTIC DISEASES

(57) Abstract: The present invention provides methods of treatment of fibrosis by identification and isolation of polynucleotide se-
quences, the expression of which is altered in fibrosis. The present invention also relates to the use of these isolated polynucleotides
and the polypeptides encoded thereby as probes for diagnosis, for screening of treatment modalities and as targets for modulation
in kidney fibrosis and in other fibrotic conditions, including ocular scarring and cataract. In particular, the present invention pro-
vides methods, compounds and pharmaceutical compositions for the treatment of fibrosis in general, and kidney fibrosis and related
pathologies and ocular scarring and cataract in particular. Novel pharmaceutical compositions comprising oligonucleotides or anti-
bodies are also provided.